

AC

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

REVISED VERSION

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
18 October 2001 (18.10.2001)

PCT

(10) International Publication Number
WO 01/76532 A2(51) International Patent Classification⁷: A61K 31/7088,
38/00, 39/395, C12N 1/20, 15/12, C12P 19/34, 21/06,
G01N 33/53

(21) International Application Number: PCT/US01/11655

(22) International Filing Date: 9 April 2001 (09.04.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/547,596 11 April 2000 (11.04.2000) US(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- with declaration under Article 17(2)(a); without abstract;
title not checked by the International Searching Authority
- with (an) indication(s) in relation to deposited biological
material furnished under Rule 13bis separately from the
description

(48) Date of publication of this revised version:

7 March 2002

(15) Information about Correction:

see PCT Gazette No. 10/2002 of 7 March 2002, Section II

(71) Applicant: COGENT NEUROSCIENCE, INC.
[US/US]; 710 West Main Street, Durham, NC 27701 (US).(72) Inventors: BARNEY, Shawn; 106 Branch Way Road,
Apex, NC 27502 (US). THOMAS, Mary, Beth; 860
Shady Lawn Road, Chapel Hill, NC 27514 (US). PORT-
BURY, Stuart, D.; 602 Gatehouse Lane, Durham, NC
27707 (US). PURANAM, Kasturi; 4921 Vista Wood Way,
Durham, NC 27713 (US). KATZ, Lawrence, C.; 3628
Carlisle Drive, Durham, NC 27707 (US). LO, Donald, C.;
312 Glenwood Drive, Chapel Hill, NC 27514 (US).(74) Agents: CORUZZI, Laura, A. et al.; Pennie & Edmonds
LLP, 1155 Avenue of the Americas, New York, NY 10036
(US).For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

WO 01/76532 A2

(54) Title: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING CONDITIONS, DISORDERS, OR DIS-
EASES INVOLVING CELL DEATH

(57) Abstract:

PATENT COOPERATION TREATY

PCT

DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT (PCT Article 17(2)(a), Rules 13ter and 39)

Applicant's or agent's file reference 10001-006-228	IMPORTANT DECLARATION	Date of mailing (day/month/year) 17 JUL 2001
International application No. PCT/US01/11655	International filing date (day/month/year) 09 APRIL 2001	(Earliest) Priority Date (day/month/year) 11 APRIL 2000
International Patent Classification (IPC) or both national classification and IPC Please See Continuation Sheet.		
Applicant COGENT NEUROSCIENCE, INC.		

This International Searching Authority hereby declares, according to Article 17(2)(a), that no international search report will be established on the international application for the reasons indicated below.

1. ☐ The subject matter of the international application relates to:
 - a. ☐ scientific theories.
 - b. ☐ mathematical theories.
 - c. ☐ plant varieties.
 - d. ☐ animal varieties.
 - e. ☐ essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes.
 - f. ☐ schemes, rules or methods of doing business.
 - g. ☐ schemes, rules or methods of performing purely mental acts.
 - h. ☐ schemes, rules or methods of playing games.
 - i. ☐ methods for treatment of the human body by surgery or therapy.
 - j. ☐ methods for treatment of the animal body by surgery or therapy.
 - k. ☐ diagnostic methods practiced on the human or animal body.
 - l. ☐ mere presentations of information.
 - m. ☐ computer programs for which this International Searching Authority is not equipped to search prior art.
2. ☒ The failure of the following parts of the international application to comply with prescribed requirements prevents a meaningful search from being carried out:

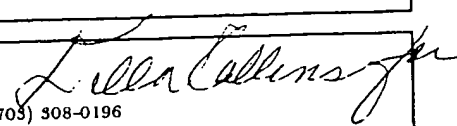
☒ the description
☒ the claims
☒ the drawings
3. ☒ The failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions prevents a meaningful search from being carried out.

☒ the written form has not been furnished or does not comply with the standard.
☐ the computer readable form has not been furnished or does not comply with the standard.
4. Further comments:
Please See Continuation Sheet.

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Form PC-P157 (03/01) (Rev. 10/99) ★
Washington, D.C. 20231

Authorized officer

MARY TUNG (703) 308-0196



DECLARATION OF NON-ESTABLISHMENT OF
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/11655

The International Patent Classification (IPC) or National Classification and IPC are as listed below:

IPC(7): A61K 31/7088, 38/00, 39/395; C12N 1/20, 15/12; C12P 19/34, 21/06; G01N 33/53 US Cl.: 424/139.1;
435/7.1, 69.1, 91.1, 252.3, 320.1; 514/12, 44; 536/23.5

4. Further Comments (Continued):

A meaningful search cannot be performed on the instant claims.
The claims appear to encompass an unfathomable number of inventions because of the number of claimed sequences.

It is noted that the instant claim set is apparently drawn to a multitude of DNA or amino acid sequences shown in Figures 4-13. Each of Figures 4-13 are apparently broken up into a multitude of subfigures. Claim 1 (a) apparently refers to "an amino acid sequence which is shown in all of Figures 4A-AB". It is not at all clear how one sequence can be the same as all those separate, distinct sequences. Perhaps applicant intended to refer to the various subfigures in the alternative? Or maybe the open claim language "comprising" as in an amino acid sequence which comprises all of those shown in Figures 4A-AB.

Figures 4-13 are defective because the sheets are not numbered in consecutive Arabic numbers. See PCT/RO/106 mailed May 4, 2001. Further, the first sheet of each of the Figures 4-13 contains a heading "open reading frame for..." and the text "Fig No." These words are missing from the subsequent sheets of each of the subfigures 4-13. The figures are not clearly labeled. Further, with regard to the headings, PCT Rule 11.11(a) prohibits words in the drawings.

Each figure does not have a unique label which says "Fig. No. 4A, Figure No. 4B", etc. Some of the figures apparently contain subfigures which run over onto the next sheet. See 10L, 10J, etc. Further, some of the figures apparently contain subfigures which do not have a figure label, see the text in the box above Figure 10P. Furthermore, the numbering system of the sequences appears to be incorrect, see numbers 340 and 341, both denoting the same position of the last line of amino acids of Figure 10H. None of the aberrations are permissible and a search of any such material would not be meaningful.

Beyond all these errors, the overriding problem with performing a search on the claims is that in the figures and of the Brief Description of the Figures, pages 13-15, no SEQ ID Nos are provided. Without any such correlation, it is impossible to determine which of the sequences recited in the claims correspond to those recited in the sequence listing. Absent that correlation, it is impossible to determine the full scope of the claimed invention or to search even a portion of the claimed invention.

PCT Rule 6.2(a) states that the claims shall not, except when absolutely necessary, rely, in respect to the technical features of the invention, on references to the description of the drawings. In particular, they shall not rely on such references as "as described in part...of the description" or "as illustrated in figure...of the drawings". The nature of the instant invention does not meet the criteria of "absolutely necessary" because these claims could have easily been drafted to include the particular SEQ ID Nos of the sequences. That may result in the claim becoming rather lengthy, but this is to be expected when one claim appears to encompass hundreds of inventions.

The Authorized Officer contacted the applicants on 16 May 2001 concerning a potential Lack of Unity. However, upon further consideration, the claims have been determined to be unsearchable.